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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/657,860	09/09/2003	Massimiliano Castellani	18201.8	2057

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EXAMINER

BOYD, JENNIFER A

ART UNIT	PAPER NUMBER
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1771

DATE MAILED: 06/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/657,860

Applicant(s)

CASTELLANI, MASSIMILIANO

Examiner

Jennifer A. Boyd

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Double Patenting

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 1 - 12 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 - 11 of copending Application No. 10/458,331. Although the conflicting claims are not identical, they are not patentably distinct from each other because claim 1 of both inventions are directed to a wipe comprising a porous and bulky thermoplastic non-woven carrier web, an absorbent non-woven web comprising philic fibers which is secured to the carrier web at a plurality of thermal embossments and an abrasive finish. The instant application requires an abrasive finish comprising fibers while Application 10/657,860 requires an abrasive finish comprising generic abrasive particles. It would have been obvious to one of ordinary skill in the art to use abrasive fibers as the abrasive particles motivated by the desire to use a commonly employed material to decrease processing expenses.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1, 4 and 9 – 12 are rejected under 35 U.S.C. 102(e) as being anticipated by Chen et al. (US 2004/0115431).

Chen is directed to a meltblown scrubbing product (Title).

As to claims 1 and 12, Chen teaches a multilayered product including at least two distinct layers, an abrasive layer and an absorbent layer (page 1, [0006]). The abrasive layer, or Applicant's "abrasive finish", comprises coarse polymeric fibers having a diameter generally greater than 15 microns (page 1, [0006] and Abstract). The absorbent layer or Applicant's "absorbent non-woven web" may comprise a paper web of pulp fibers (page 3, [0024]). Chen teaches that the pad may also contain other layers such as a hydrophobic barrier layer on the absorbent layer (page 4, [0027]). Chen notes that the barrier layer can comprise a nonwoven (page 17, [0172]). The Examiner equates the hydrophobic barrier layer to Applicant's "non-woven carrier layer". Chen teaches that the layers may be adhered together by means of pattern bonding with a patterned heated plate (page 15, [0152]). The Examiner equates this method of bonding to resulting in Applicant's "thermic embossments".

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As to claim 4, Chen teaches that the barrier material web can comprise plastic materials (page 17, [0172]).

As to claim 9, Chen teaches that the absorbent layer has a basis weight greater than 25 gsm (page 12, [0119]).

As to claim 10, Chen teaches that the abrasive layer can comprise a copolymer (page 7, [0072]).

As to claim 11, Chen teaches that the abrasive layer has a basis weight of greater than 10 gsm (page 11, [0109]).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chen et al. (US 2004/0115431).

Chen et al. discloses the claimed invention except for that the abrasive fibers have an average diameter that is substantially 15 microns. It should be noted that the diameter of the abrasive fibers is a result effective variable. Chen notes that the materials and processes used to form the abrasive layer of the scrubbing pad may be chosen and designed with the desired end use of the product in mind. For example, a scrubbing pad designed as a personal care product, such as a face-washing pads, may include an abrasive layer which is softer and less abrasive than

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a scrubbing pad for use in household cleaning applications. Thus, the fiber diameter among other parameters may vary depending upon the desired characteristics of the final product (page 7, [0071]). It would have been obvious to one having ordinary skill in the art at the time the invention was made to create abrasive fibers having an average diameter that is substantially 15 microns since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980). In the present invention, one would have been motivated to optimize the diameter of the abrasive fibers to substantially 15 microns in order to create a pad with a softer and less abrasive scrubbing face.

7. Claims 1 – 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reeder et al. (US 6,468,931) in view of Chen et al. (US 2004/0115431).

Reeder is directed to a multi-layer thermally bonded nonwoven fabric (Title) useful for various absorbent applications including wipes (column 7, lines 50 – 55).

As to claim 1, Reeder teaches a fabric comprising first and second prebonded nonwoven webs 10 and 12 (column 4, lines 20 – 27). Reeder teaches that the webs can be formed of substantially continuous filaments or formed of staple fibers and the webs can be of the same construction or different construction (column 4, lines 28 – 40). Reeder teaches that webs 10 and 12 can comprise thermoplastic fibers and may also include other, non-thermoplastic fibers (column 4, lines 55 – 60). Reeder teaches that the webs may be made by various methods including carding, air laying and garneting for staple fiber webs and spunbonding for continuous filament webs (column 5, lines 1 – 45). In a preferred embodiment, the resultant multilayer

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thermally bonded fabric has hydrophilic properties. When the prebonded webs are formed of a hydrophobic material, such as polypropylene, hydrophilic properties are imparted using any of the techniques known in the art such as using an additive to impart hydrophilic properties to the surface of the fiber (column 7, lines 1 – 10). Reeder teaches that webs 10 and 13 are thermally bonded together by means of heated patterned calendar rolls (column 6, lines 1 – 35). The Examiner equates the first and second prebonded nonwoven webs 10 and 12 to Applicant's "non-woven carrier web" and "absorbent non-woven web". It should be noted that the limitation of "co-extruded" is not given any patentable weight because the method of forming the article is not germane to the issue of patentability of the article itself.

As to claim 3, Reeder teaches that at least one of the nonwoven webs can comprise a carded bonded staple fiber web (column 5, lines 1 – 20).

As to claims 4 and 8, Reeder teaches that each web contains thermoplastic fibers (column 4, lines 55 – 65).

As to claims 5 and 6, Reeder teaches that one of the webs can comprise bicomponent fibers comprising polyethylene and polypropylene (column 5, lines 15 – 20). It should be noted that it is known in the art that polyethylene and polypropylene are both polymers, which have a low melting temperature. Reeder also notes that it is desirable to treat the thermoplastic fibers with an additive to impart hydrophilic properties (column 7, lines 1 – 10).

Reeder fails to teach the application of an abrasive fiber finish on the absorbent non-woven web as required by claim 1.

Chen is directed to a meltblown scrubbing product (Title). Chen teaches a multilayered

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product including at least two distinct layers, an abrasive layer and an absorbent layer (page 1, [0006]). The abrasive layer, or Applicant's "abrasive finish", comprises coarse polymeric fibers having a diameter generally greater than 15 microns (page 1, [0006] and Abstract). The absorbent layer may comprise a paper web of pulp fibers (page 3, [0024]). Chen teaches that the pad may also contain other layers such as a hydrophobic barrier layer on the absorbent layer (page 4, [0027]). Chen teaches that the layers may be adhered together by means of pattern bonding with a patterned heated plate (page 15, [0152]).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply an abrasive fiber finish as suggested by Chen to the wipe of Reeder motivated by the desire to create a wipe with exfoliating capabilities.

As to claim 2, Reeder in view of Chen discloses the claimed invention except for that the abrasive fibers have an average diameter that is substantially 15 microns. It should be noted that the diameter of the abrasive fibers is a result effective variable. Chen notes that the materials and processes used to form the abrasive layer of the scrubbing pad may be chosen and designed with the desired end use of the product in mind. For example, a scrubbing pad designed as a personal care product, such as a face-washing pads, may include an abrasive layer which is softer and less abrasive than a scrubbing pad for use in household cleaning applications. Thus, the fiber diameter among other parameters may vary depending upon the desired characteristics of the final product (page 7, [0071]). It would have been obvious to one having ordinary skill in the art at the time the invention was made to create abrasive fibers having an average diameter that is substantially 15 microns since it has been held that discovering an optimum value of a result

effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980). In the present invention, one would have been motivated to optimize the diameter of the abrasive fibers to substantially 15 microns in order to create a pad with a softer and less abrasive scrubbing face.

As to claims 7 and 9, Reeder in view of Chen discloses the claimed invention except for that the porous non-woven carrier web and the absorbent non-woven web have a weight of between 9 and 50 grams per meter as required by claims 7 and 9. It should be noted that basis weight is a result effective variable. As the basis weight increases, the web becomes more durable and heavier and as the basis weight decreases, the web becomes more flexible and lightweight. The basis weight is dependent on the desired end use. It would have been obvious to one having ordinary skill in the art at the time the invention was made to create porous non-woven carrier web and the absorbent non-woven web have a weight of between 9 and 50 grams per meter as required by claims 6 and 8 since it has been held that where general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 220 F.2d 454 USPQ 233 (CCPA 1955). In the present invention, one would have been motivated to optimize the basis weight of the porous non-woven carrier web and the absorbent non-woven web in order to create suitably strong and flexible webs for use in wipes.

Conclusion

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8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Chen et al. (US 2003/0135181) is directed to a sponge-like pad comprising paper layers (Title). Chen teaches an interplay-bonded stack of wet resilient tissue webs encased in a two-sided encasement comprising a first cover material 62 having a relatively smooth surface and, on the opposing side, a second cover material 64 having an abrasive surface for scrubbing (page 9, [0073]). Chen teaches that the second cover material comprising an abrasive surface can be formed from a nonwoven meltblown or spunbonded web, that includes abrasive particles on the surface of the web (page 9, [0077]). The abrasive particles can comprise coarse fibers (page 11, [0096]) having a diameter from about 30 microns to about 2 mm (page 11, [0097]). The first cover material comprising a smooth surface can be a meltblown web, a spunbond web, a bonded carded web, a paper web or a laminate containing any of the above webs (page 10, [0090]).

Chen et al. (US 2004/0111817) is directed to a disposable scrubbing product (Title) comprising an abrasive layer and an absorbent fibrous layer (page 1, [0006]). Additional layers may be attached to the pad such as a hydrophobic nonwoven barrier layer (page 17, [0170 – 0172]).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer A. Boyd whose telephone number is 571-272-1473. The examiner can normally be reached on Monday thru Friday (8:30am - 6:00pm).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on 571-272-1478. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jennifer Boyd
June 4, 2005



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